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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,118	08/30/2001	Richard Cudd	9265.00	9806
26889	7590	01/26/2005		
MICHAEL CHAN			EXAMINER	
NCR CORPORATION			HERNANDEZ, OLGA	
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DAYTON, OH 45479-0001			ART UNIT	PAPER NUMBER
			2144	

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/943,118	CUDD ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Olga Hernandez	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 30 August 2001.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-69 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-69 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 30 August 2001 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date 11702.
- 4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 6-9, 13-16, 18, 28-31, 35, 41-43, 45, 48-50, 53-55, 57-59 are rejected under 35 U.S.C. 102(b) as being anticipated by Boyle (5,864,854).

As per claims 1, 30, 50, 54 and 57, Boyle discloses requesting client broadcasting a data request over the network to the server and/or one or more other clients or connecting to at least one client over whose address is on a proxy list held by the requesting client; and the requesting client then downloading the requested data across the network from the cache of a proxy server client that is caching the requested data (column 3, lines 23-42, 60-66, column 4, lines 7-19, figures 1, 4 and 5).

As per claims 2 and 31, Boyle discloses the user terminals running web browsers, and the respective local caches are associated with the browsers on the user terminals (column 3, lines 60-66).

As per claim 6, Boyle discloses requesting client to a plurality of devices and requesting to choose from that plurality the requested data if is not provided by one of the device (column 4, lines 33-50, column 6, lines 41-51).

As per claims 7-8, Boyle discloses sending the requested data containing respective address of the plurality of devices (column 4, lines 15-19).

As per claim 9, Boyle discloses requesting client assesses the speeds of connections to more than one address in the proxy list, records and compares the measured speeds, and downloads the requested data from the address with the fastest connection (column 4, lines 33-50).

As per claims 13 and 41, Boyle discloses maintaining a look-up table correlating items of data with addresses of proxy server clients that are caching that data (column 6, lines 9-16).

As per claim 15, Boyle discloses the requested information downloaded and caching the request and associating the address of the requested device with the table to use it for future request (column 6, lines 6-29).

As per claims 16, 43 and 55, Boyle discloses updating the table by assessing connection speed and deciding if the information should be discarded (column 6, lines 40-58, column 4, lines 35-50).

As per claim 18, Boyle discloses the requesting client stores the address of the proxy server client that provided the requested data, and assembles an address list of the proxy server clients most commonly accessed to obtain the requested data (column 2, lines 39-47, column 3, lines 26-31, 40-45, column 4, lines 7-17).

As per claims 28, 29, 45, 48, 49 and 58, Boyle discloses monitoring the workload so the workload will be efficiently distributed through the available systems (column 4, lines 33-50).

As per claims 14 and 42, Boyle discloses reporting changes in the cache status to the requesting client (column 6, lines 52-58).

As per claim 35, Boyle discloses responding to the data request from the device (figures 1 and 4).

As per claim 36, Boyle discloses selecting the address from of a plurality of devices and optionally containing the address of one (column 4, lines 50-58).

As per claim 53, speed is **1. Physics**. The rate or a measure of the rate of motion, especially: **a.** Distance traveled divided by the time of travel. **b.** The limit of this quotient as the time of travel becomes vanishingly small; the first derivative of distance with respect to time.<sup>1</sup>

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-5, 32, 33-34, 51, 52, 59-61, 63-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle (5,864,854) in view of Brustoloni (2002/0046348).

As per claims 3, 32 and 51, Boyle teaches how distribute the data around the devices (server, client, etc) if there is any problem with the workload. Boyle does not teach doing it within a predetermined target period. However, Brustoloni teaches it in paragraph [0059]. Therefore, it would have been obvious to one skill in the art to combine the aforementioned inventions in order to eliminate or provide automatic recovery from race conditions and

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collisions in a heuristic methodology for routing incoming packets from a common server to a plurality of clients that are communicating with the server and sharing a common access link.

As per claims 4, 33 and 52, Boyle does not teach the period being variable. However, Brustoloni teaches it in paragraph [0049]. Therefore, it would have been obvious to one skill in the art to combine the aforementioned inventions in order to eliminate or provide automatic recovery from race conditions and collisions in a heuristic methodology for routing incoming packets from a common server to a plurality of clients that are communicating with the server and sharing a common access link.

As per claims 5 and 34, speed is *1. Physics*. The rate or a measure of the rate of motion, especially: **a.** Distance traveled divided by the time of travel. **b.** The limit of this quotient as the time of travel becomes vanishingly small; the first derivative of distance with respect to time.<sup>2</sup>

As per claims 59, 67 and 68, Boyle discloses requesting client broadcasting a data request over the network to the server and/or one or more other clients or connecting to at least one client over whose address is on a proxy list held by the requesting client; and the requesting client then downloading the requested data across the network from the cache of a proxy server client that is caching the requested data (column 3, lines 23-42, 60-66, column 4, lines 7-19, figures 1, 4 and 5). Further, Boyle discloses monitoring the workload so the workload will be efficiently distributed through the available systems based on efficiency (column 4, lines 33-50). Boyle does not teach doing it within a predetermined target period. However, Brustoloni teaches it in paragraph [0059]. Therefore, it would have been obvious to one skill in the art to combine the

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aforementioned inventions in order to eliminate or provide automatic recovery from race conditions and collisions in a heuristic methodology for routing incoming packets from a common server to a plurality of clients that are communicating with the server and sharing a common access link.

As per claim 60, Boyle teaches selecting from the list the addresses of the plurality of devices and optionally containing the address of the server (column 6, lines 9-16).

As per claim 61, Boyle discloses the connection based on the bandwidth to an address in the list (column 4, lines 35-67).

As per claim 63, Boyle discloses requesting client assesses the speeds of connections to more than one address in the proxy list, records and compares the measured speeds, and downloads the requested data from the address with the fastest connection (column 4, lines 33-50).

As per claim 64, Boyle teaches comparing the connection speed to an address and downloading the request data from that address if the connection speed meets the criteria (column 4, lines 33-57).

As per claim 65, Boyle discloses reporting changes in the cache status to the requesting client (column 6, lines 52-58).

As per claim 66, Boyle discloses reporting to a plurality of devices (e.g. server, clients) the requested data (column 2, lines 50-55, column 6, lines 10-11, figures 1 and 4).

Claims 10, 11, 17, 19-24, 25, 44, 46, 47, 51, 56 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle (5,864,854) in view of Cotichini et al (6,300,863).

As per claims 10, 22 and 69, Boyle does not teach assessing the speed of the connection by pinging the associated address. However, Cotichini teaches it in column 12, lines 13-18. Therefore, it would have been obvious to one skill in the art to combine the aforementioned inventions in order to trace lost or stolen electronic articles through global network, initiating a traceroute to provide the host with the Internet communication links connecting the client to the host.

As per claims 17, 19, 44, 46, 56 and 62, Boyle does not teach the address in the table being pinged and comparing the respond time. However, Cotichini teaches it in column 12, lines 13-18. Therefore, it would have been obvious to one skill in the art to combine the aforementioned inventions in order to trace lost or stolen electronic articles through global network, initiating a traceroute to provide the host with the Internet communication links connecting the client to the host.

As per claim 24, Boyle discloses the requesting client stores the address of the proxy server client that provided the requested data, and assembles an address list of the proxy server clients most commonly accessed to obtain the requested data (column 2, lines 39-47, column 3, lines 26-31, 40-45, column 4, lines 7-17, column 5 –first level).

As per claims 25 and 47, Boyle teaches a tree or chain structure comprising a plurality of levels (column 5, lines 50-61).

As per claim 20, Boyle discloses the address of the plurality proxy server clients (column 4, lines 15-19).

As per claim 21, Boyle discloses assessing the speed of at least one connection (column 4, lines 33-50).

As per claims 11, and 23, Boyle discloses requesting client assesses the speeds of connections to more than one address in the proxy list, records and compares the measured speeds, and downloads the requested data from the address with the fastest connection (column 4, lines 33-50).

Claims 12, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle (5,864,854) in view of Johnson (2003/0061353).

As per claims 12 and 26, Boyle does not teach checking the speed connection meeting a target connection speed before the request (comparing connection speed). However, Johnson teaches it in paragraph [0041]. Therefore, it would have been obvious to one skill in the art to combine the aforementioned inventions in order to optimize network performance redirecting service request to other routers that are more suitable to service the request that the router that received the request.

As per claim 27, Boyle does not teach assessing the speed of the connection by pinging the associated address. However, Johnson teaches it in paragraph [0055]. Therefore, it would have been obvious to one skill in the art to combine the aforementioned inventions in order to optimize network performance redirecting service request to other routers that are more suitable to service the request that the router that received the request.

Claims 36, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle (5,864,854) in view of Borella et al (6,768,743).

As per claim 36, Boyle teaches the list containing the respective addresses of the plurality of devices (column 4, lines 35-50). Boyle does not teach the option containing the address of a server. However, Borella teaches it in the abstract. Therefore, it would have been obvious to one skill in the art to combine the aforementioned inventions in order to allocate multiple types of network addresses for multiple addresses networks.

As per claim 37, Boyle discloses the requesting client stores the address of the proxy server client that provided the requested data, and assembles an address list of the proxy server clients most commonly accessed to obtain the requested data (column 2, lines 39-47, column 3, lines 26-31, 40-45, column 4, lines 7-17, column 5 –first level).

As per claims 39 and 40, Boyle discloses requesting client assesses the speeds of connections to more than one address in the proxy list, records and compares the measured speeds, and downloads the requested data from the address with the fastest connection (column 4, lines 33-50).

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boyle (5,864,854) in view of Borella et al (6,768,743), further in view of Cotichini et al (6,300,863).

As per claim 38, neither Boyle nor Borella teaches the address in the table being pinged and comparing the respond time. However, Cotichini teaches it in column 12, lines 13-18. Therefore, it would have been obvious to one skill in the art to combine the aforementioned inventions in order to trace lost or stolen electronic articles through global network, initiating a traceroute to provide the host with the Internet communication links connecting the client to the host.

***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-69 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-50 of copending Application No. 09/943,113. Although the conflicting claims are not identical, they are not patentably distinct from each other because the applicant is using of similar language to claim the same subject matter where the same structure is used to download and upload data via a network, where each client has a local cache to perform the same functions such as comparing the speed and time of the different devices.

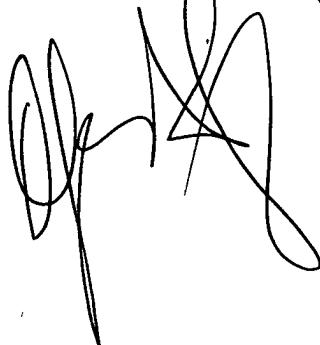
This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Hernandez whose telephone number is 571-272-7144. The examiner can normally be reached on Mon-Thu 7:30am-6:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on 571-272-3925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Olga Hernandez  
Primary Examiner  
Art Unit 2144